

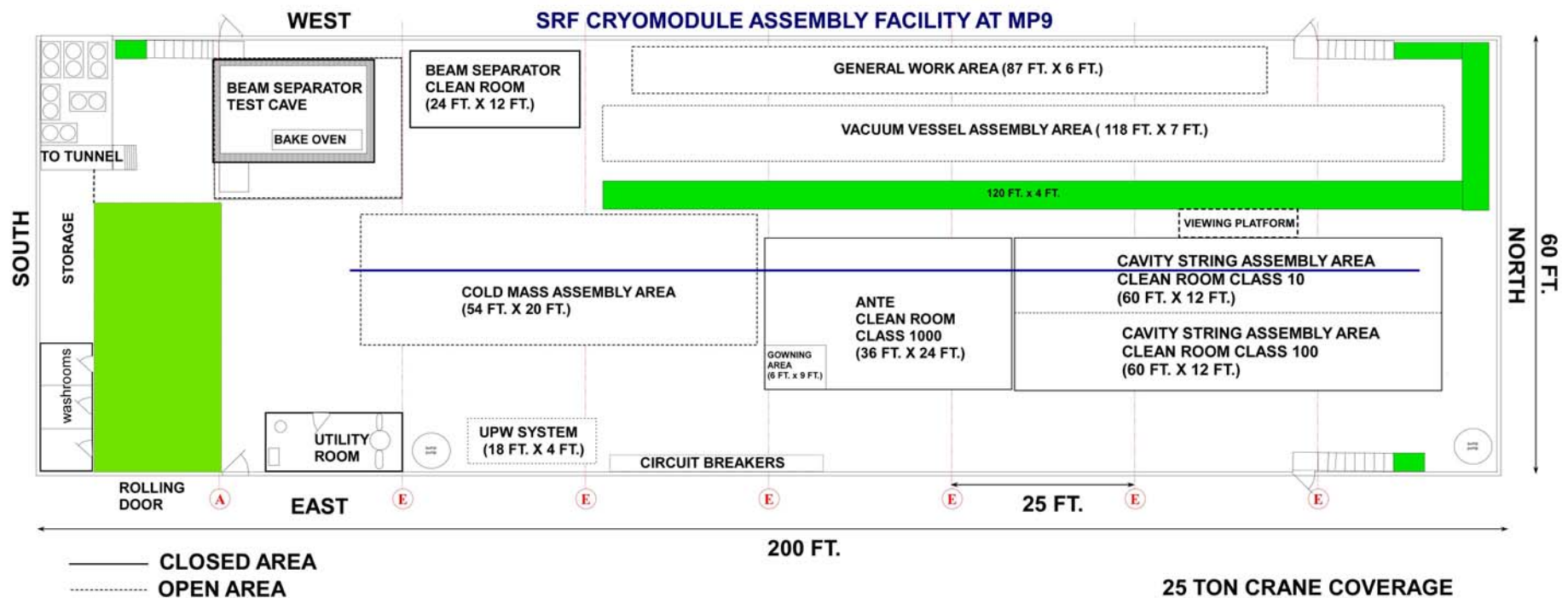
Cryomodule Assembly Facility (CAF) Setup Status

Tug Arkan

January 11, 2005

CAF Infrastructure Plans at MP9

1.3 GHz Elliptical Cryomodules Assembly Facility (CAF) Infrastructure at MP9





Current Status of MP9 Building

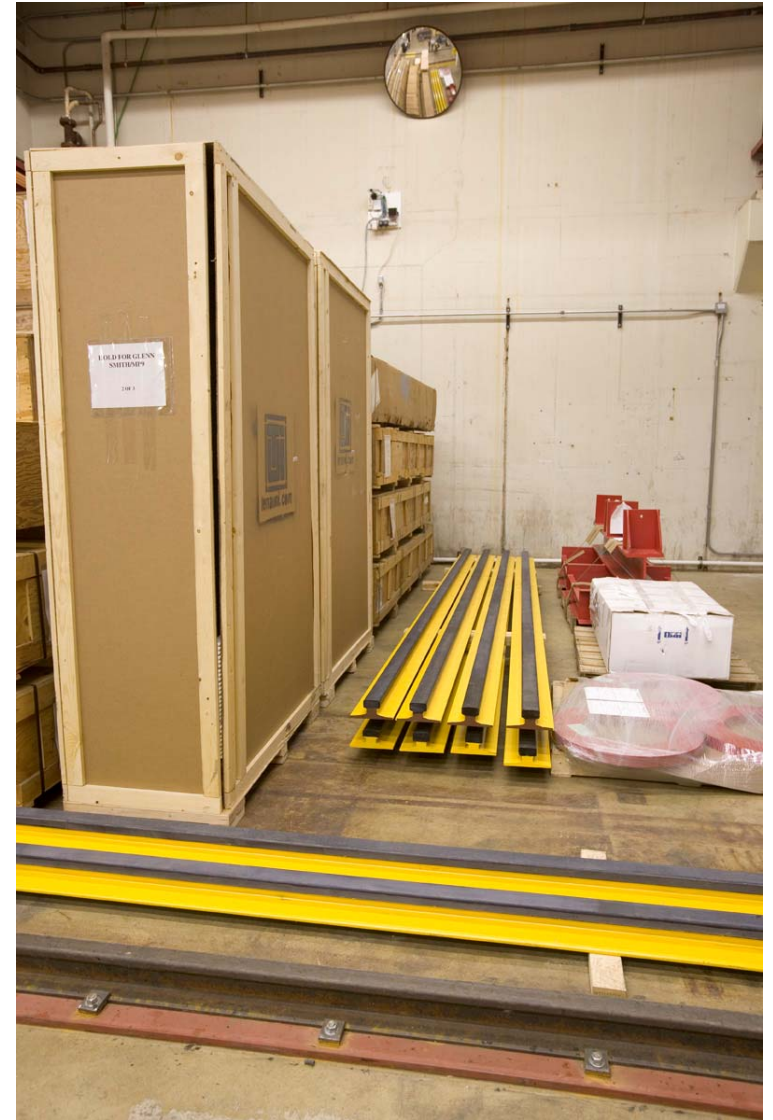
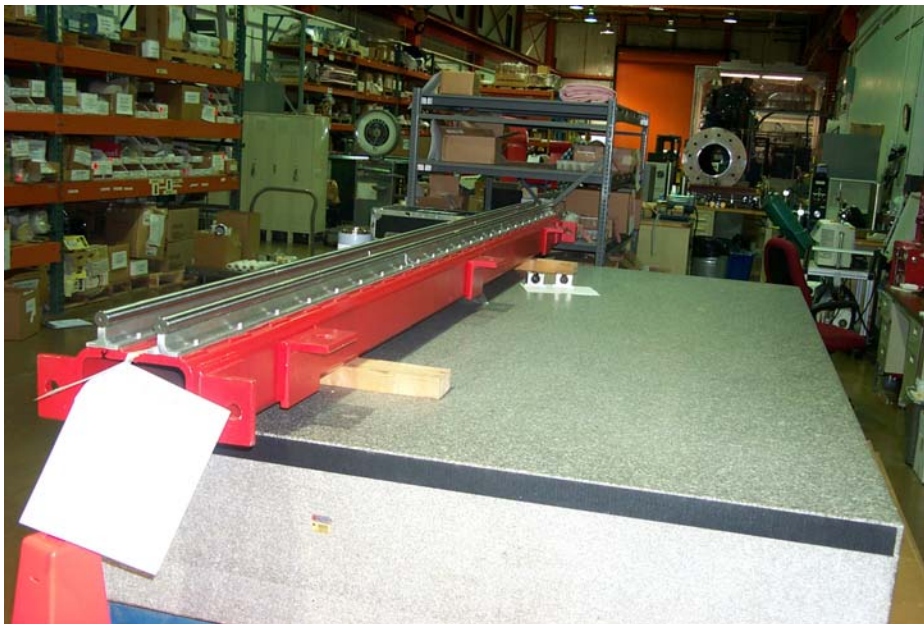


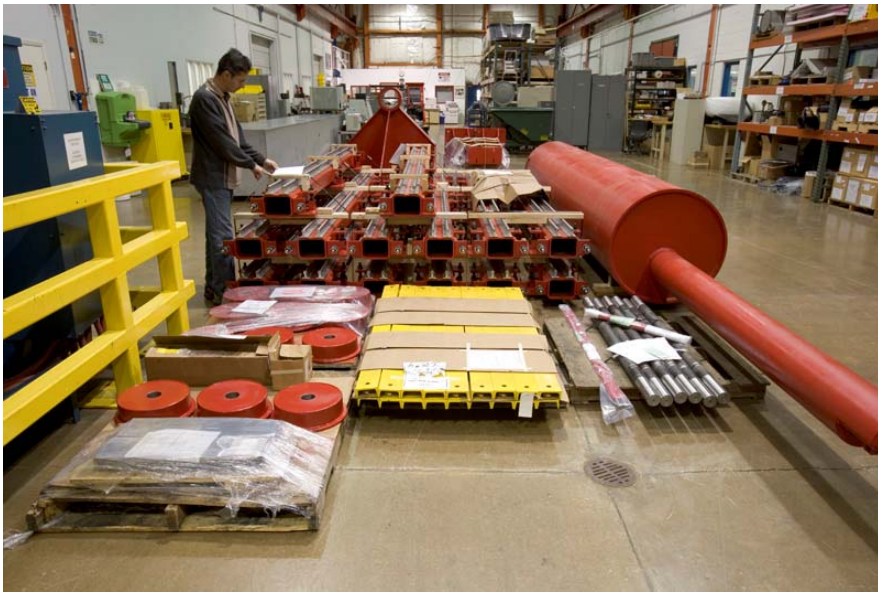


Current Procurement Status

- **Cavity String Assembly Rail System: \$85K**
 - Received, currently stored at IB4
- **Cold Mass Assembly Fixture: \$31K**
 - Except the strongback, all other parts are received.
 - Strongback will be in house by the middle of January 06
- **Vacuum Vessel Assembly Fixture: \$105K**
 - Received, currently stored at IB4

Total: \$221K Spent/Obligated in FY05







Cavity String Assembly Clean Rooms Procurement

- Pre-design meeting was held with the vendor at FNAL on October 7, 06.
- Design was completed by the middle of November 06.
- Two weeks long lab-wide DP-18 design review was completed on December 5, 06.
 - All the comments were responded and addressed by the vendor.
- Procurement of the material / equipment to fabricate the clean room components was started by the vendor.
- Construction will start on January 12 (JHA issues are partially resolved). The vendor's superintendent arrived today to Fermilab.
- 70-80 days construction period
- Turnover of the clean rooms to Fermilab by the vendor: First week of April 06.
- (\$957K) Obligated in FY05



Fixtures Installation Plans & Schedule

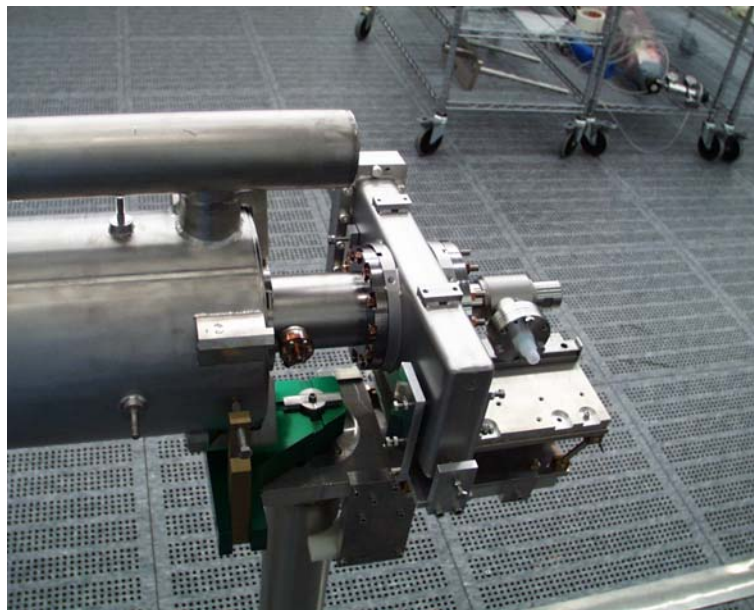
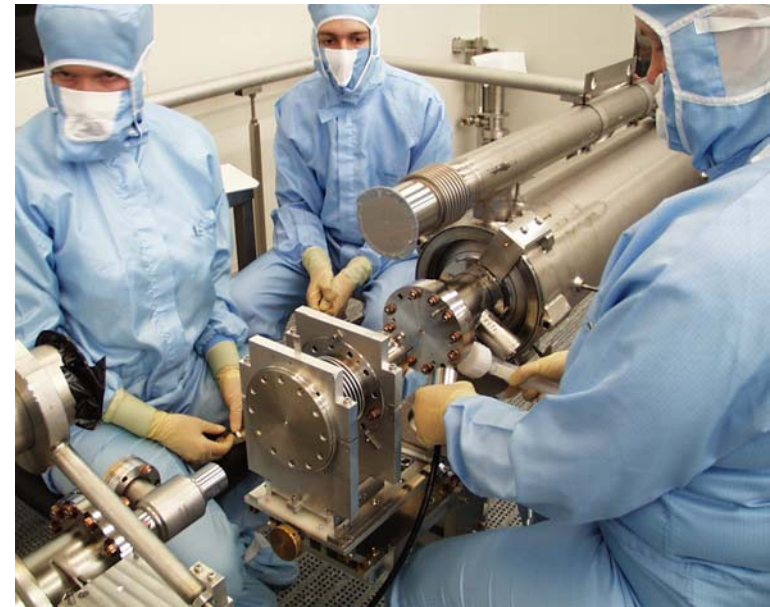
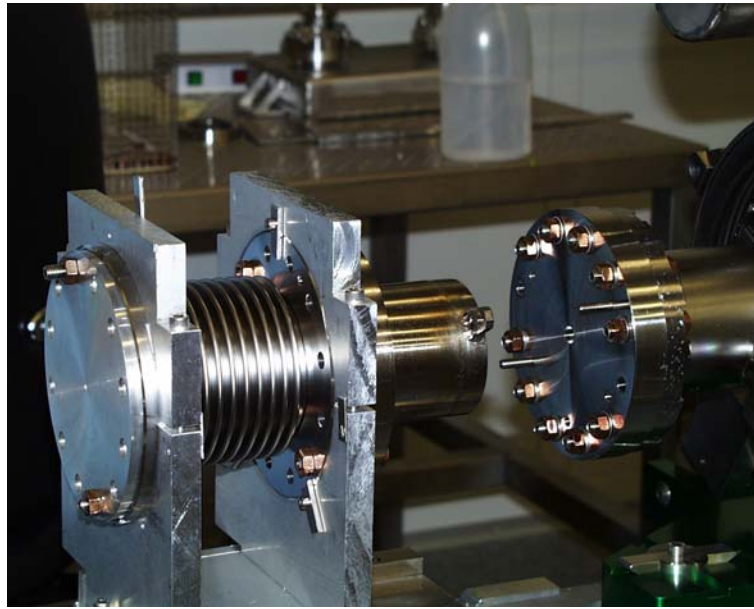
- Cavity String Assembly Rail System need to be installed before the clean room raised floor is put in place. The rail system will be underneath the clean room Class 10 area extending through Class 1000 area to Cold Mass Assembly Area (non clean room) [Scheduled for the second week of February 06].
- Cold Mass Assembly and Vacuum Vessel Assembly Fixtures will be installed in April 06 after the clean rooms construction is completed.
- Cavity String Assembly Fixtures are being currently designed /Americanized from DESY drawings. We plan to install them in May 06 when the clean rooms are operational.



FY06 Procurement Plans for CAF

- MP9 Building Floor Epoxy coating (\$25K) [completed]
- MP9 Building inside ceiling cleaning (\$10K) [completed]
- Construction of the clean rooms: (\$80K)
 - T&M work to tie the clean rooms to the MP9 house power (\$20K)
 - Fire sprinkler tie-in (\$5K)
 - Metasys DDC Controls network for the clean rooms (\$5K)
 - Clean room consultant services (\$25K)
- Complete remaining fixturing: (\$225K)
 - Cavity String Assembly Fixturing ~30 fixtures [under design]
 - Additional Fixturing & Tooling
- UPW (\$20K)
- Equipment & components for the clean rooms: (\$125K)
 - Vacuum hardware (\$50K)
 - Clean room attire & furniture (\$25K)
 - Ultrasonic cleaner (\$50K) [ordered]
 - Portable clean room (\$10K)
 - Clean room cart for cavity transport (\$15K)
- Miscellaneous (\$40K)

Total: \$475K





1st Cryomodule Assembly Plans

- Cavity String Assembly Procedures & Fixtures Learning at DESY (February 20 –March 3, 06)
- CAF Clean Rooms operational: April 06
- Cryomodule Assembly Procedures Learning at DESY & Zanon (April-May 06)
- CAF Infrastructure ready & operational: May-June 06
- Assemble 1st Cryomodule (4 months): Start date depends when we receive the kit from DESY